Approved for use through 3/31/2007 900 0651-0021
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371

ATTORNEY'S DOCKET NUMBER 123019-1051 (UHID 2228)

U.S. APPARATION NO. TE KNOWN SEP 37 CFR 1.5)

| CONCENTING A SUBMISSIO | 714 OHDER 33 0.3.0. 37 1 | | | | | | | | | |
|---|--|---|--|--|--|--|--|--|--|--|
| INTERNATIONAL APPLICATION NO. PCT/US2003/022318 | INTERNATIONAL FILING DATE 7/17/03 | PRIORITY DATE CLAIMED 7/22/02 | | | | | | | | |
| TITLE OF INVENTION Method to Overcome Instability of Ultra-Shallow Semiconductor Junctions | | | | | | | | | | |
| APPLICANT(S) FOR DO/EO/US Wei-Kan Chu, Lin Shao, and Jiarui Liu | | | | | | | | | | |
| Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: | | | | | | | | | | |
| This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. | | | | | | | | | | |
| 2. This is a SECOND or SUBSEQUENT s | This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. | | | | | | | | | |
| This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. | | | | | | | | | | |
| 4. The US has been elected (Article 31). | The US has been elected (Article 31). | | | | | | | | | |
| 5. A copy of the International Application | A copy of the International Application as filed (35 U.S.C. 371(c)(2)) | | | | | | | | | |
| a. is attached hereto (required | | | | | | | | | | |
| b. 📉 has been communicated by | b. XXI has been communicated by the International Bureau. | | | | | | | | | |
| c. is not required, as the applic | c. is not required, as the application was filed in the United States Receiving Office (RO/US). | | | | | | | | | |
| 6. An English language translation of the | e International Application as filed (35 U.S.C | C. 371(c)(2)). | | | | | | | | |
| a. is attached hereto. | | | | | | | | | | |
| | tted under 35 U.S.C. 154(d)(4). | | | | | | | | | |
| 7. Amendments to the claims of the Inte | rnational Application under PCT Article 19 (| (35 U.S.C. 371(c)(3)) | | | | | | | | |
| a. are attached hereto (requi | red only if not communicated by the Interna | tional Bureau). | | | | | | | | |
| b. have been communicated | b. have been communicated by the International Bureau. | | | | | | | | | |
| <u></u> | <u> </u> | | | | | | | | | |
| have not been made and v | will not be made. | | | | | | | | | |
| 8. An English language translation of th | An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). | | | | | | | | | |
| 9. An oath or declaration of the inventor | An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). | | | | | | | | | |
| 10. An English language translation of the Article 36 (35 U.S.C. 371(c)(5)). | An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). | | | | | | | | | |
| Items 11 to 20 below concern document(s |) or information included: | | | | | | | | | |
| 11. An Information Disclosure Statement | under 37 CFR 1.97 and 1.98. | | | | | | | | | |
| 12. An assignment document for recording | ng. A separate cover sheet in compliance w | ith 37 CFR 3.28 and 3.31 is included. | | | | | | | | |
| 13. A preliminary amendment. | A preliminary amendment. | | | | | | | | | |
| 14. X An Application Data Sheet under 37 (| An Application Data Sheet under 37 CFR 1.76. | | | | | | | | | |
| 15. A substitute specification. | A substitute specification. | | | | | | | | | |
| 16. A power of attorney and/or change of | A power of attorney and/or change of address letter. | | | | | | | | | |
| · | uence listing in accordance with PCT Rule | 13 <i>ter</i> .2 and 37 CFR 1.821- 1.825. | | | | | | | | |
| 18. A second copy of the published Interr | national Application under 35 U.S.C. 154(d) | (4). | | | | | | | | |
| | A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4). | | | | | | | | | |
| 20. X Other items or information: Intern | Other items or information International Search Report, Request for Rectification | | | | | | | | | |

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 2231-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Page 1 of 2

DT05 Rec'd PCT/PT0 2 1 JAN 2005
PT0-1390 (Rev. 12-2004)
Approved for use through 3/31/2007. OMB 0651-0021
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

| U.S. APPLICATION NO (15 nown see 37 CFR 1.5) INTERNATIONAL APPLICATION NO. PCT/US2003/022318 | | | | | | ATTORNEY'S DOCKET NUMBER | | | |
|---|--|--------------|---|------------|-------------------------|--------------------------|---------------------------------------|-----------------|--|
| PCT/US2003/022318 | | | | | 123029-1051 (UHID 2228) | | | | |
| 21. The following fees are submitted: | | | | | | - | plicant use | Office use only | |
| a) Basic national fee\$300.00 | | | | | | \$ | 300 | | |
| b) Examination fee\$200.00 | | | | | \$200.00 | \$ | 200 | | |
| c) Search fee\$500.00 | | | | | \$ | 500 | · · · · · · · · · · · · · · · · · · · | | |
| | TOTAL OF ABOVE CA | I CIII ATIO | ONS = | | \$1000.00 | \$ | 1000 | | |
| | ee for specification and c | Irawings fil | ed in paper over 100 sheets (ex | ccludir | ng sequence | | | | |
| listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof. | | | | | | | | | |
| | | | | | 1 | | | | |
| Total Sileets | Extra sileets | | Number of each additional 50 or fraction RATE thereof (round up to a whole number) | | | | | | |
| 14- 100 = | 0 /50 = | | 0 | 一 | × \$250.00 | s | -0- | | |
| | | <u> </u> | ·- | | | " | | | |
| | 30.00 for furnishing the o date (37 CFR 1.492(e)). | ath or decl | aration later than 30 months fro | m the | earliest | \$ | 130. | · | |
| CLAIMS | NUMBER FI | LED | NUMBER EXTRA | | RATE \$ | | | | |
| Total claims | Total claims 15 | | 0 | × \$50.00 | | \$ | -0- | | |
| Independent clai | ms 2 | - 3 = | 0 | x \$200.00 | | \$ | -0- | | |
| MULTIPLE DEPI | ENDENT CLAIM(S) (if a | oplicable) | · | + | \$360.00 | \$ | -0- | | |
| | | | TOTAL OF ABOVE | CALC | ULATIONS = | \$ | 1130 | | |
| Applicant c | laims small entity status | See 37 C | FR 1.27. The fees indicated abo | ove ar | e reduced | \$ | 565 | | |
| SUBTOTAL = | | | | | | \$ | 565 | | |
| Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)). | | | | | | \$ | -0- | | |
| TOTAL NATIONAL FEE = | | | | | | \$ | 565 | | |
| Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied | | | | | \$ | -0- | | | |
| by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property + | | | | | | \$ | 565 | | |
| TOTAL FEES ENCLOSED = | | | | | | | $m\tilde{m}$ | | |
| Amount to be refunded: | | | | | | | | \$ | |
| Amount to be charged | | | | | | | | \$ | |
| a. A check in the amount of \$ to cover the above fees is enclosed. | | | | | | | | - | |
| b. Please charge my Deposit Account No in the amount of \$ to cover the above fees. | | | | | | | | | |
| A duplicate copy of this sheet is enclosed. c. | | | | | | | | | |
| Accoun | nt No. <u>U/-U153</u> . A d | uplicate co | py of this sheet is enclosed. | | | | | | |
| | | | 'ARNING: Information on this fo card information and authorizat | | | olic. (| Credit card informati | on should not | |
| | n appropriate time limi | | CFR 1.495 has not been met | , a pet | tition to revive | (37 | CFR 1.137(a) or (b)) | must be filed | |
| _ | | | , | | 1 | 1 | | | |
| SEND ALL CORRESPONDENCE TO: | | | | | | XX | Isal lo | | |
| Tim Headley Cardona Lymna Sovall LLP SIGNATURE | | | | | | | -0-09 | | |
| Gardere Wynne Sewell LLP SIGNATURE 1000 Louisiana, Suite 3400 Tim Headle | | | | | | ley | | | |
| Houston, TX 77002 NAME | | | | | | | | | |
| Telephone: (713) 276-5320 31,765 | | | | | | | | | |
| Fax: (713) 276-6320 REGISTRATIO | | | | | | NO N | IUMBER | | |

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Wei-Kan Chu

Lin Shao

Jiarui Liu

Application Number:

Not Assigned

Filed:

January 21, 2005

Group Art Unit:

Not Assigned

Examiner:

Not Assigned

For: Met

Method to Overcome Instability of

Ultra-Shallow Semiconductor Junctions

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

CERTIFICATE OF MAILING

I hereby certify that this document is being deposited on this day with the U.S. Postal Service as, Express Mail under 37 C.F.R. 1.10 and is addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Signature of Person Mailing Correspondence

Deborah Foots

Typed or Printed Name of Person Mailing Correspondence

Date of Signature:

EV 451433664 US Express Mail Label Number

TRANSMITTAL LETTER

- 1. Transmittal Letter to the U.S. Designated/Elected Office (DO/EO/US) Concerning a Filing Under 35 U.S.C. 371;
- 2. Application Data Sheet;
- Copy of Published Application;
- 4. Copy of Search Report
- 5. Copy of Request for Rectification;
- Check for \$565; and
- Postcard.

Applicants believe that no additional fees are required for this filing. If this is incorrect, Applicants authorize the Commissioner to charge any fees to Deposit Account No. 07-0153.

Respectfully submitted

Date: January 21, 2005

Tim Headley

Reg. No. 31,765

Gardere Wynne Sewell LLP 1000 Louisiana, Suite 3400 Houston, Texas 77002-5011 Telephone: (713) 276-5320

Fax: (713) 276-6320

Email: theadley@gardere.com

IN THE UNITED STATES INTERNATIONAL SEARCHING AUTHORITY

International Application No.:

PCT/US03/22318

International Filing Date:

17 JULY 2003

Title of Invention:

METHOD TO OVERCOME INSTABILITY OF

ULTRA-SHALLOW SEMICONDUCTOR

JUNCTIONS

Applicant:

Mail Stop PCT

P.O. Box 1450

Commissioner for Patents

Alexandria, VA 22313-1450

UNIVERSITY OF HOUSTON

CERTIFICATE OF MAILING

Express Mail No.: EV 45143454 Date of Deposit:

I certify that the accompanying paper is being deposited with the United States Postal Service and sent "Via Express Mail" service under 37 CFR 1.10 on the date indicated above and is addressed to the Mail Stop PCT, Commissioner for Patents, P.O. Box 1450,

Washington, DC 20231.

Typed name: Deborah Foots

REQUEST FOR RECTIFICATION

Applicant respectfully requests rectification of an obvious error in the International Application under PCT Rules 91 and 91.1(e)(ii). The following obvious error, as published by WIPO, requires rectification:

(57) Abstract: Line 1, after "stable" change unction to Junction.

Applicant believes that no additional fees are due for the filing of this Request. However, if any additional fees are due, Applicant authorizes the RO/US to charge Deposit Account No. 07-0153.

Dated: 6-18-04

Tim Headley

Registration No.: 31,765

Gardere Wynne Sewell LLP

1000 Louisiana Street, Suite 3400

Houston, Texas 77002 Phone: (713) 276-5320

Fax: (713) 276-6320

Email: theadley@gardere.com

TRANSMITTAL LETTER TO THE UNITED STATE RECL. ING OFFICE

| Date |) June 18 2004 |
|-----------------------|----------------|
| International A atio. | PCT/US03/22318 |
| Attorney D. No. | 123029-2003 |

| 110- | 1 302 | · (ICCV. C | 74-2003) (MOG | 1 · · · · · · · · · · · · · · · · · · · | CTOSZ.FIG /KE | V U.3 | | | | 1 | | | |
|---------|--|--|--|---|-------------------|--------------|---------------|--------------|----------|-------------|---------------------|---------------------------------------|---|
| 1. | | Cert | ification und | ler 37 CFR 1.10 (if a | pplicable) | | DT | 05 Rer'r | ' POT | /PTO 2 | 21. | JAN 2005 | |
| | | | E | V 451434545 US | |] [| June 18, 2004 | | | | | ٦ | |
| | | | Expre | ss Mail mailing number | | 1 i | | | Da | ate of Depo | sit | | 7 |
| | "E: | hereby certify that the application/correspondence attached hereto is being deposited with the United States Postal Service Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to Mail Stop CT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. | | | | | | | | op | | | |
| | | | | | A |] [| Deborar | Foots | - | | | | ٦ |
| | E | | Signature of p | person mailing correspon | dence | j t | Тур | ed or printe | d name | of person r | nailing c | orrespondence | |
| | _ | | | | | · | | | | | | | |
| II. | Ц | New | Internationa | al Application | | | | | _ | | | | |
| | TI | TLE | | | | | | | | Ea (I | rliest pr Day/Mo | riority date nth/Year) | 4 |
| | | SCREENING DISCLOSURE INFORMATION: In order to assist in screening the accompanying international application for purposes of determining whether a license for foreign transmittal should and could be granted and for other purposes, the following information is supplied. (Note: check as many boxes as apply): | | | | | | | | | | | |
| | A. | | The invention disclosed was not made in the United States. | | | | | | | | | | |
| | B. | | There is no | s no prior U.S. application relating to this invention. | | | | | | | | | |
| | C. | | The follow | ing prior U.S. applica | tion(s) contain s | ubject matte | r which | is related t | o the ir | vention d | isclosed | l in the attached | l |
| | | | | al application. (NOTI and this listing does no | | | | or may no | ot be cl | aimed on J | form PC | CT/RO/101 | |
| | Г | applic | ation no. | | | | filed on | 1 | | | | · · · · · · · · · · · · · · · · · · · | ٦ |
| | - | | ation no. | | | | filed on | | | | | | ┪ |
| | D. | The present international application contains additional subject matter not found in the prior U.S. application(s) identified in paragraph C. above. The additional subject matter is found on pages and DOES NOT ALTER MIGHT BE CONSIDERED TO ALTER the general nature of the invention in a manner which would require the U.S. application to have been made available for inspection by the appropriate defense agencies under 35 U.S.C. 181 and 37 CFR 5.1. See 37 CFR 5.15. | | | | | | | | | | | |
| III. | A. B. | A Response to an Invitation from the RO/US. The following document(s) is (are) enclosed: A Request for An Extension of Time to File a Response | | | | | | | | | | | |
| | | | | of Attorney (General | or Regular) | | | | | | | | |
| | C. | Ш | Replacen | nent pages: | | | | | | | | | _ |
| | | | pages | | of the request | (PCT/RO/10 | l) p | ages | | | of the | figures | _ |
| | | | pages | | of the descript | ion | F | ages | <u> </u> | · | of the | abstract | |
| | | | pages | of the claims | | | | | | | | | |
| | D. | Ш | Submission of Priority Documents | | | | | | | | | | |
| | | <u>[</u> | Priority docum | Priority document | | | | | | | 7 | | |
| | E. | | Fees as spe | cified on attached Fee | Calculation she | et form PC | r/RO/10 | l annex | | | | | _ |
| IV. | A Request for Rectification under PCT 91 | | | | | | | | | | | | |
| v. | X | Othe | r (please spec | cify): Return postcard | j. | | | | | | | | |
| The | Applicant | | | | | | Tim Headley / | | | | | | |
| The pe | g this | S [27] | | Agent (Reg. No.) | | | | yped name | 1 1 | Ér | | | |
| form is | ine | 岩 | • | 31.765 Representative | | Vin | // | Yest | X | 0 | | | |
| | | | QUILITIVII. | A TOP I TOP I I WILLIAM I | | | - | Cinner | | _ | | | |

Attorney(s): Tim Headley Check Amount: \$N/A Client/Matter#: 123029-2003 Int'l Serial No.: PCT/US03/22318 Applicant(s): University of Houston Int'l Filing Date: July 17, 2003 Title: Method to Overcome Instability of Ultra-Shallow Semiconductor Junctions Today's Date: 6/18/03 Due Date: PCT FOR INTERNATIONAL PATENT sheets PCT Request sheets Response sheets Description sheets Letter sheets Claims sheets Request for Rectification sheets Abstract sheets Transmittal Letter sheets Drawings Other: sheets Power X_ Express Mail EV451434545US sheets General Power X Certificate of Mailing sheets PCT Demand First Class Mail sheets Fee Calculation Hand Delivery sheets Article 19 Amendment _ sheets Article 34 Amendment DT02 Rec'd PCT/PTO 1-8 JUN 2004

